

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

GENERAL OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. < MO-G05xxxx >

Owner: < name >
Address: < address >

Continuing Authority:
Address: < name, or Same as above >
< address, or Same as above >

Facility Name: < name >
Facility Address: < physical address >

Legal Description: 1/4, 1/4, 1/4, Sec. xx, TxxN, RxxW, < county > County

Receiving Stream: < receiving stream > < (U, C, P, L1, L2, L3) >
First Classified Stream and ID: < 1st classified stream > < (U, C, P, L1, L2, L3) > < (ID number) >
USGS Basin & Sub-watershed No.: < (USGS HUC14 #) >

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

All Outfalls – SIC #9512

Land reclamation projects involving land disturbance and projects consisting solely of pond and shaft dewatering under control of the Missouri Department of Natural Resources Land Reclamation Program – SIC #1629

Surface discharges from these reclamation projects will result from rainfall runoff/impoundment discharges, and shaft pumpings. Sediment will be controlled during construction with filter fabric, check dams, sediment ponds, straw bales or other Best Management Practices, which will minimize sediment loss.

These projects may also involve stockpiling biosolids for reclamation use. Best Management Practices will be employed at these sites.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

February 9, 2001

Effective Date

Issue Date

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

February 8, 2006

Expiration Date
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 8	
					PERMIT NUMBER MO-G05xxxx	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Stormwater Associated with Coal Mine Land Disturbance</u>						
Flow	MGD	*		*	once/month	24 hr. estimate
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter***	grab
pH – Units	SU	****		****	once/quarter***	grab
<u>Discharge from Coal Mine Shaft Pumpings</u>						
Flow	MGD	*		*	once/day when discharge occurs (Note 1)	
Settleable Solids (Note 2)	mL/L/hr	1.5		1.0	*****	grab
pH – Units	SU	****		****	*****	grab
Visible Oil Sheen	*****	*		*	*****	observation
<u>Coal Mine and Processing Area Impoundment Draining (Note 3)</u>						
Flow	MGD	*		*	once/day when discharge occurs	grab
Settleable Solids (Note 2)	mL/L/hr	1.5		1.0	once/day when discharge occurs	grab
Iron, Dissolved	mg/L	7.0		3.5	once/discharge when discharge occurs	grab
pH – Units	SU	****		****	once/day when discharge occurs	grab
Conductivity	umhos/cm	*		*	once/discharge when discharge occurs	grab
Acidity	mg/L	(Note 4)		(Note 4)	once/discharge when discharge occurs	grab
Alkalinity	mg/L	(Note 4)		(Note 4)	once/discharge when discharge occurs	grab
Sulfate	mg/L	*		*	once/discharge when discharge occurs	grab
Visible Oil Sheen	*****	*		*	once/discharge when discharge occurs	observ.
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>< date ></u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 8	
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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Stormwater Associated with Land Disturbance at Metallic Mineral Reclamation Sites</u> (Note 5)						
Flow	MGD	*		*	once/month	24 hr. estimate
pH – Units	SU	****		****	once/month	grab
Visible Oil Sheen	*****	*		*	once/month	observation
Lead, Total Recoverable	mg/L	*		*	once/month	grab
Cadmium, Total Recoverable	mg/L	*		*	once/month	grab
Zinc, Total Recoverable	mg/L	*		*	once/month	grab
Settleable Solids	mL/L/hr	*		*	once/month	grab
Arsenic, Total Recoverable	mg/L	*		*	once/month	grab
Iron, Dissolved	mg/L	*		*	once/month	grab
Mercury	mg/L	*		*	once/month	grab
Sulfate	mg/L	*		*	once/month	grab
Chloride	mg/L	*		*	once/month	grab
Barium	mg/L	*		*	once/month	grab
Conductivity	umhos/cm	*		*	once/month	grab
Chromium, Total Recoverable	mg/L	*		*	once/month	grab
Copper, Total Recoverable	mg/L	*		*	once/month	grab
Cobalt, Total Recoverable	mg/L	*		*	once/month	grab
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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS				PAGE NUMBER 4 of 8		
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Stormwater Associated with Shaft and Impoundment Draining at Metallic Mineral Reclamation Sites (Note 5)						
Flow	MGD	*		*	once/day	24 hr. estimate when discharge occurs
pH – Units	SU	****		****	once/day	grab when discharge occurs
Visible Oil Sheen	*****	*		*	once/day	observation when discharge occurs
Lead, Total Recoverable	mg/L	*		*	once/day	grab when discharge occurs
Cadmium, Total Recoverable	mg/L	*		*	once/day	grab when discharge occurs
Zinc, Total Recoverable	mg/L	*		*	once/day	grab when discharge occurs
Settleable Solids	mL/L/hr	*		*	once/day	grab when discharge occurs
Arsenic, Total Recoverable	mg/L	*		*	once/day	grab when discharge occurs
Iron, Dissolved	mg/L	*		*	once/day	grab when discharge occurs
Mercury	mg/L	*		*	once/day	grab when discharge occurs
Sulfate	mg/L	*		*	once/day	grab when discharge occurs
Chloride	mg/L	*		*	once/day	grab when discharge occurs
Barium	mg/L	*		*	once/day	grab when discharge occurs
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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 5 of 8	
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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Stormwater Associated with Shaft and Impoundment Draining at Metallic Mineral Reclamation Sites</u> (Note 5) (continued)						
Conductivity	umhos/cm	*		*	once/day	grab when discharge occurs
Chromium, Total Recoverable	mg/L	*		*	once/day	grab when discharge occurs
Copper, Total Recoverable	mg/L	*		*	once/day	grab when discharge occurs
Cobalt, Total Recoverable	mg/L	*		*	once/day	grab when discharge occurs
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MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Reserved
- *** Sample once per quarter in the months of March, June, September, and December.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- ***** Samples shall be collected each time shaft pumpage results in an off site discharge.
- ***** Report as "Present" or "Absent".

Note 1 – Report total volume discharged.

Note 2 – The Settleable Solids test must be taken during shaft pumping or impoundment draining. It is not necessary to analyze for Settleable Solids before discharge.

Note 3 – If the project includes discharge of waters from abandoned coal mine and processing area impoundments, water quality analysis will be required for each such impoundment prior to discharge using the abandoned coal mine and processing area impoundment draining parameters. This requirement does not include temporary impoundments created by reclamation contractors. If the impoundment is less than 150 feet in length, a single grab sample taken near the midpoint will be an adequate sample. If the impoundment is longer than 150 feet, three grab samples should be taken, one near each end and one near the midpoint. If pre-project water quality in the receiving stream does not meet state water quality standards, effluent limits may be established to allow discharge of water of the same quality as that of the receiving streams. (In this case, the receiving stream would be the nearest stream sampling station, classified or unclassified for which there are at least two sets of pre-project water quality data). See C. Special Conditions #1.

Note 4 – Alkalinity must exceed acidity.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 5 – If the project includes discharge of waters from metallic mineral mine shafts and impoundments, water quality analysis will be required for each impoundment or shaft prior to discharge using the metallic mineral mine impoundment draining parameters. If the impoundment is less than 150 feet in length, a single grab sample taken near the midpoint will be an adequate sample. If the impoundment is longer than 150 feet, three grab samples should be taken, one near each end and one near the midpoint. If pre-project water quality in the receiving stream does not meet state water quality standards, effluent limits may be established to allow discharge of water of the same quality as that of the receiving streams. (In this case, the receiving stream would be the nearest stream sampling station, classified or unclassified for which there are at least two sets of pre-project water quality data.) See Special Conditions #1.

APPLICABILITY

1. This permit authorizes the discharge of storm water runoff and impoundment water from reclamation sites, which are under the control of the Missouri Department of Natural Resources, Land Reclamation Program.
2. If at any time the Missouri Department of Natural Resources determines that the quality of waters of the state may be better protected by requiring the Land Reclamation Program to apply for an individual National Pollutant Discharge Elimination System permit, the department may do so.
3. If at any time the Land Reclamation Program should desire to apply for an individual NPDES permit, they may do so.
4. This permit does not authorize discharge of stormwater or impoundment water within 100 feet of waters classified in 10 CSR 20-7.031, Water Quality Standards, as major reservoirs (L₂).

SAMPLING REQUIREMENTS

1. Data shall be maintained by the permittee for a three-year period and shall be supplied to the Department of Natural Resources, Water Pollution Control Program on a quarterly basis.
2. If the results of the sampling show settleable solids levels of 2.5 milliliters per liter per hour or greater, written notification shall be made to the Department of Natural Resources, Water Pollution Control Program, within five days of notification of analytical results. The letter shall indicate the date(s) sampled, the actual analytical results, permit number, and shall include what revisions or new management practices are being implemented to reduce the solids. Repeat monitoring shall occur on the next rainfall event over 0.3 inches.

C. SPECIAL CONDITIONS

1. Preproject Stream and End of Project Sampling:

Preproject and end of project stream sampling is required to document water quality using the following guidelines if the project involves land disturbance of more than five acres or impoundment draining:

- a. These receiving stream locations must be sampled unless alternate arrangements are approved by the Water Pollution Control Program.
 1. The unclassified stream at a point downstream of all drainage from the project site if there is flowing water.
 2. The first classified stream at a point where that stream is downstream of all drainage from the project site. This station should be as close to the project site as access will allow, but at least one-half (1/2) mile below the project unless the stream to be sampled flows into another classified stream less than one mile below the project.
 3. If the project area drains to more than one classified stream, all receiving classified streams must be sampled unless the area draining to that classified stream is less than ten acres and contains no gob pile, slurry pond or other concentrated form of coal waste or acid forming materials.
 4. All locations will be sampled at least twice prior to initiation of reclamation work. Sampling dates must be at least four weeks apart, and sampling should not occur within one week following precipitation, which produced surface runoff. If there is no discharge, report as no discharge. At the end of the project the locations need to be sampled once.
 5. Samples will be analyzed for the same parameters as impoundment draining with the addition of dissolved oxygen.
2. Quarters end March 31, June 30, September 30, and December 31. Discharge Monitoring Reports are due 30 days after the end of each quarter.
3. The analytical and sampling methods used must conform to the following reference methods unless alternates are approved by the Water Pollution Control Program.
 - a. Standard Methods for the Examination of Waters and Wastewaters, (14, 15 or 16th edition) published by the Water Pollution Control Federation, 3900 Wisconsin Avenue, Washington, D.C. 20016;
 - b. A.S.T.M. Standards, Part 31 Water and Part 26 Atmospheric Analysis, published by American Society for Testing and Materials, Philadelphia, PA 19103;
 - c. Methods for Chemical Analysis of Water and Wastes, (EPA-600/4-79-020) published by Environmental Protection Agency, Water Quality Office, Analytical Quality Control Laboratory, 1014 Broadway, Cincinnati, OH 54202; and
 - d. NPDES Compliance Sampling Inspection Manual, published by Environmental Protection Agency, Enforcement Division, Office of Water Enforcement, 401 Main Street, S.W., Washington, D.C. 20460.
4. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;

C. SPECIAL CONDITIONS (continued)

5. General Criteria (continued):

- (e) There shall be no significant human health hazard from incidental contact with the water;
- (f) There shall be no acute toxicity to livestock or wildlife watering;
- (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

6. This permit may be reopened and modified, or alternatively revoked and reissued, to:

- (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
- (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
- (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

TERMINATION OF PERMIT

This permit may be terminated when activities covered by the permit have ceased. If termination is sought, the permittee shall submit Form H, Termination of a General Permit.